

REMARKS

The application as filed did not include an abstract or a Figure 5D. The specification is amended herein to correct these discrepancies. Specifically, an abstract is included herein and reference to Figure 5D is omitted from the specification.

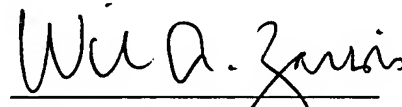
CONCLUSION

The Examiner is invited to contact Applicants' undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Respectfully submitted,

WAGNER, MURABITO & HAO LLP

Date: 7/24/02



William A. Zarbis
Reg. No. 46,120

Two North Market Street
Third Floor
San Jose, California 95113
(408) 938-9060

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Specification:

Paragraph beginning at line 19 of page 7 has been amended as follows:

--FIGURES 5A-5C[D] illustrate[s] an exemplary version of formatted warehoused data in accordance with [an] embodiments of the present invention for navigating a large amount of data.--

Paragraph beginning at line 20 of page 22 has been amended as follows:

--Figures 5A-5C[D] illustrate exemplary versions of formatted warehoused data in accordance with an embodiment of the present invention for navigating a large amount of data. Specifically, formatted warehoused data 500 is a cross-tabular illustration of one embodiment for representing the formatted warehoused data stored in repository 105. Although a specific cross-tabular version of formatted warehoused data 500 is shown, many organizational formats of warehoused data 500 may be used. The cross-tabular format is shown merely for purposes of brevity and clarity.--

Paragraph beginning at line 8 of page 23 has been amended as follows:

--With reference still to Figures 5B-5C[D], the present embodiment illustrates further hierarchical overview versions of Figure 5A. Specifically, Figures 5B-5C[D] are subtotal versions of the initial formatted warehoused data 500. In one embodiment, subtotalling data is a method for dynamically rolling formatted warehoused data 500 up to a higher level to make it more digestible. Specifically, subtotalling refers to trying to distill as much information as possible from a larger more detailed table of data. That is, table 520 is a subtotal of table 500, table 540 is a subtotal of table 520[, and table 560 is a subtotal of table 540]. Therefore, table 540 [560] shows the least amount of detail while table 500 shows the most detail. It is appreciated that tables 500, 520, and 540[, and 560] are exemplary and are shown in the present embodiment merely for purposes of clarity.--

Paragraph beginning at line 9 of page 25 has been amended as follows:

--In order to distill the formatted warehoused data 500 into pieces that can be readily conveyed by voice, analytic data interface 103 formats the warehoused data 500 into a plurality of hierarchical overviews (e.g., Figures 5A-5C[D]). Specifically, formatted warehoused data 500 is reduced in scope by subtotalling the contents thereof. Then, at each subtotal (e.g. overview), a

user has the option of drilling deeper into a specific result in order to review the underlying data. For example, if process 600 were to deliver an initial hierarchical overview (e.g., table 540 [560] of Figure 5C[D]) to device 200, the initial information received in response to an inquiry may be a quantity statement then a cost statement. The user may then wish to hear more information or hear the information from a different perspective by selecting a new level of clarity. For example, in a report with Year and Product attributes, the user could first hear sub-totaled metric values for a given year for all products. Then after selecting a specific product, they could hear the metric values for the given year for the selected product. In order to obtain this information, the user formulates an inquiry. In one embodiment, the user accomplishes this with a voice command.--

Paragraph beginning at line 10 of page 26 has been amended as follows:

--In general, a report exemplified by table 500 of Figure 5A is generated and resides in applications server 106 of Figure 1. When a user at a wireless device accesses this information, instead of hearing an item-by-item recitation of all the entries in table 500. A hierarchical overview such as that of table 540 [560] is heard. The user can then select one of the items in the hierarchical overview, and receive more details about that item. This process can be repeated until the user reaches the desired level of detail. Thus,

according to the present invention, a user can receive detailed information using a voice based communications system, but without having to hear an item-by-item recitation of a multitude of entries. The present invention thus provides a ready mechanism for navigating through a large table of data using voice commands.--

Paragraph beginning at line 1 of page 27 has been amended as follows:

--With reference still to process 600, any hierarchical overview is possible with respect to the present embodiment, the examples with regard to Figures 5A-5C[D] are shown merely as one example of a multitude of possible overview breakdown criteria. It is further appreciated that the present process 600 can be performed on a screen and may not require voice cues at all. In fact, the hierarchical overview utilized in process 600 may respond to voice inquiries, hot key inquiries, a single click of a cursor, or any other possible input features which are known to one skilled in the art.--

Paragraph beginning at line 19 of page 28 has been amended as follows:

--At step 604 of Figure 6, the present embodiment causes formatted warehoused data 500 to be distilled into a plurality of hierarchical overviews (e.g. 500, 520, and 540[, and 560] of Figures 5A-5C). Further, the hierarchical

overviews (e.g. 500, 520, and 540[, and 560]) comprise a subtotal of selected entries from the formatted warehoused data 500. Step 604 may be performed in a variety of ways in accordance with embodiment of the present invention. For example, the present embodiment may cause formatted warehoused data 500 to be distilled into a plurality of hierarchical overviews (e.g. 500, 520, and 540[, and 560]) in any manner similar to that described herein.--

Paragraph beginning at line 8 of page 29 has been amended as follows:

--At step 606 of Figure 6, the present embodiment causes device (e.g., 200) to receive a hierarchical overview (e.g. 540 [560]) in response to a first inquiry. Step 606 may be performed in a variety of ways in accordance with embodiment of the present invention. For example, the present embodiment may cause device 200 to receive a hierarchical overview 540 [560] in any manner similar to that described herein.--

In the Abstract:

Please insert the following as new page 38.

--ABSTRACT OF THE DISCLOSURE

Methods for navigating a large amount of data are disclosed. In one embodiment, the present invention accesses a source of formatted

warehoused data. The present invention then displays a grid on a display device. In one embodiment, the grid is an iconic representation of the formatted warehoused data. The grid is comprised of elements, each element corresponding to some portion of the formatted warehoused data. The present invention displays a portion of the formatted warehoused data on the display device in response to a selection of a corresponding element of the grid. In another embodiment, the formatted warehoused data is condensed so that it can be read in summary form to a user using a voice-based protocol. The user can issue voice commands to drill down deeper into the data, until the desired information is reached. The user thus doesn't need to hear all of the information in the formatted warehoused data, but instead can make inquiries to directly navigate to a particular item of interest.--